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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,435	04/15/2004	Hyun-Sik Yoon	Q80481	6308
23373 7590 07/16/2010				
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SUITE 800				
WASHINGTON, DC 20037				
EXAMINER				
PENG, FRED H				
ART UNIT		PAPER NUMBER		
2426				
NOTIFICATION DATE		DELIVERY MODE		
07/16/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/824,435

Applicant(s)

YOON ET AL.

Examiner

FRED PENG

Art Unit

2426

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9,11,12,14-19 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,11,12,14-19 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is in response to an AMENDMENT entered 04/15/2010.

Status of Claims

2. Claims 1-2, 4-9, 11-12, 14-19 and 21-23 are pending in this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4, 6-9, 11-12, 14-15, 17-19 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lennon et al (US 2002/0107973) in view of Applicant's admit prior art (AAPA).

Regarding Claims 1 and 14, Lennon discloses an apparatus (FIG.2; comprising user terminal 101 and server side 212, 211, 210) with corresponding method operable to convert digital content metadata comprising:

a mapping module (212) for converting the received external digital content metadata into the digital content metadata peculiar to the network (Para 8 - Para 11; Para 73 lines 1-14; Para 101; converting non-XML compliant into XML description metadata); and

a search module (212) for locating a Uniform Resource Locator (URL) using a unique identifier, wherein the unique identifier is assigned to each program in the received external digital content metadata (Para 73; Para 89-91; Para 101-110; Para 198; a content item description such as a name attribute or title for a selected program or a visual identifier representing the content in some way that is not XML compliant including Dublin Core, MPEG-7, DIG35 etc; a name attribute

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or title for a selected program or visual identifier of a URI representing the content is part of the descriptors contained in the metadata and are unique identifiers), said URL accessing a program in the received external digital content metadata, and wherein the search module locates the URL after the received external digital content metadata is converted by the mapping module (Para 73-74; Para 101-123; the media browser then is able to use the located URL, a link in the XML compliant metadata after conversion of the content identifier in the non-XML compliance descriptor to access the program).

Lennon is not explicit about locating the URL through a pre-assigned identifier such as standard CRID commonly used in the TV-Anytime forum.

In an analogous art, AAPA discloses locating URL through pre-assigned identifier such as standard CRID used in the TV-Anytime (refer to description of the Related Art of the invention, especially Para 20) which can be used in metadata in XML format without further conversion. AAPA further discloses a need of metadata conversion between two popular TV-Anytime and UPnP forums as both standards could co-exist in the same storage device PVR (FIG.1, 30; also refer to description of the related art of the specification).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include locating the URL through pre-assigned identifier such as standard CRID used in the TV-Anytime, as taught by AAPA to take advantage of the existing popular broadcast forum, thus access more available program resources.

Regarding Claims 2, 7-9, 12 and 17-19, Lennon discloses the digital content metadata received external to the network can be some known metadata standards including well known MPEG for television program selection and converting into XML compliant description for searching using a unique identifier such as a visual identifier of a URI (Para 89; Para 101-106; Para 198).

Lennon is silent about specific TV-Anytime metadata and Universal Play and Plug (UPnP) and the pre-assigned unique identifier is a Content Reference Identifier (CRID).

In an analogous art, AAPA discloses that both TV-Anytime and UPnP metadata and related CRID are standards. AAPA further discloses TV-Anytime also includes popular MPEG format for television program while UPnP uses TCP/IP protocol and can be freely integrated into existing system (Description of related Art of application publication, Para 5-24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the conversion from TV-Anytime type of metadata (MPEG) to UPnP type of metadata (XML compliant) to take advantage of existing popular standards to accommodate more users.

Regarding Claims 4 and 15, Lennon discloses a network apparatus (FIG.2, element 212) with corresponding method operable to convert digital content metadata comprising:

a metadata receiving unit for receiving digital content metadata external to the network (Para 9);

a converter for converting the received external digital content metadata into the digital content metadata peculiar to the network by causing the external digital content metadata received in the metadata receiving unit to be mapped into the peculiar digital content metadata in a predetermined manner (Para 8 – Para 14) and by locating a URL using a unique identifier assigned to each program in the received external digital content metadata content metadata, wherein said URL accesses a program in the received external digital content metadata, and wherein the URL is located after the received external digital content metadata is mapped into the peculiar digital content metadata (Para 1; Para 71; Para 72 line 8 before last – last line; Para 73 lines 1-14; the media browser then is able to use the located URL, a link in the XML compliant metadata to access the program after conversion of the content identifier in the non-XML compliance document); and

a storage unit for storing the converted digital content metadata therein to allow devices in the network to use the converted digital content metadata (FIG.2, element 210; Para 73; the Legacy Database is converted digital content metadata for legacy metadata usage).

Lennon is not explicit about locating the URL through a pre-assigned identifier such as standard CRID commonly used in the TV-Anytime forum.

In an analogous art, AAPA discloses locating URL through pre-assigned identifier such as standard CRID used in the TV-Anytime (refer to description of the Related Art of the invention, especially Para 20) which can be used in metadata in XML format without further conversion. AAPA further discloses a need of metadata conversion between two popular TV-Anytime and UPnP forums as both standards could co-exist in the same storage device PVR (FIG.1, 30; also refer to description of the related art of the specification).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include locating the URL through pre-assigned identifier such as standard CRID used in the TV-Anytime, as taught by AAPA to take advantage of the existing popular broadcast forum, thus access more available program resources.

Regarding Claim 6, Lennon further discloses a processing module for analyzing and using metadata which has not been mapped into properties supported by classes of digital content metadata peculiar to an existing network among external digital content metadata mapped into the digital content metadata peculiar to the network (Para 12).

Regarding Claim 11, the limitations have been analyzed and described as in Claims 4 and 6.

Regarding Claim 21, Lennon further discloses the mapping module converts the received external digital content metadata into the digital content metadata peculiar to the network by mapping the external digital content metadata into classes of the digital content metadata (Para 12-14).

Regarding Claim 22, Lennon further discloses the mapping module converts the received external digital content metadata into the digital content metadata peculiar to the network by defining a new class of the digital content metadata peculiar to the network, said new class corresponding to the received external digital content metadata (Para 104).

Regarding Claim 23, Lennon in view of AAPA discloses the unique identifier located in the received external digital content metadata binds information of the received external digital content metadata, and wherein the mapping module uses the information bound by the unique identifier for converting received external digital content metadata into digital content metadata peculiar to a network (Para 105-106; a visual identifier or text identifier such as a name attributes or CRID in TV-Anytime binds information of the received external digital content metadata).

Lennon further discloses using set of rules to process the undefined metadata used in a class of digital content metadata a peculiar to the network (Para 101-107) but is not explicit about placing these undefined metadata in a particular section.

Logically grouping similar data type together for easy processing or identification is well known, or alternatively can be an engineering choice.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined system of Lennon and AAPA to include placing these undefined metadata in a particular section for easier processing as an engineering choice.

4. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lennon et al (US 2002/0107973) and Applicant's admitted prior art (AAPA) as in claim 4, and further in view of Sie et al (US 2002/0199188).

Regarding Claims 5 and 16, Lennon fails to disclose a metadata filtering unit for deleting a part or all of the converted digital content metadata stored in the storage unit according to a predetermined condition.

In an analogous art, Sie discloses deletion of metadata when corresponding digital content is deleted (Para 132).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lennon's system to include deletion of metadata when corresponding digital content is deleted, as taught by Sie as a common practice to maintain updated digital content database.

Response to Arguments

5. Applicant's arguments with respect to claims 1-2, 4-9, 11-12, 14-19 and 21-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Claims 1-2, 4-9, 11-12, 14-19 and 21-23 are rejected.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRED PENG whose telephone number is (571)270-1147. The examiner can normally be reached on Monday-Friday 09:30-19:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hirl can be reached on (571) 272-3685. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Fred Peng/

Examiner, Art Unit 2426

/Joseph P. Hirl/

Supervisory Patent Examiner, Art Unit 2426

July 13, 2010